



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/050,061

01/15/2002

Toren S. Davis

H0002526 (A66) US

1119

7590

07/17/2006

Honeywell International Inc.
Law Dept. AB2
PO Box 2245
Morristown, NJ 07962-9806

EXAMINER

TORRES, MELANIE

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,061

Applicant(s)

DAVIS, TOREN S.

Examiner

Melanie Torres

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006 by the Board of Appeals.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,7-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following rejection is applied based upon reconsideration of the rejections and recommendations cited in the Decision on Appeal from the Board of Appeals (04/21/2006).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5, 7, 8, 10, 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Griffen et al. in view of Cunningham et al.

Re claims 5, 7, 8, 10, 12 and 13, Griffen et al. teach a tuned mass damper comprising a mass having predetermined inertia properties and a plurality of isolators (hexapod/secondary suspension) arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass (Secondary mass) and each isolator second end adapted to couple to a structure (Primary Mass or Payload) that may experience vibrations at particular frequencies in six independent degrees of freedom, wherein each of the isolators in combination with the mass, is configured to be tuned independent of the other isolators to reduce a first particular frequency of the vibrations experienced by the structure (Fig. 9, Column 1, line 67 – Column 2, line 9, Column 7, lines 18-21) and wherein each isolator second end is adapted to couple the structure at a predetermined location thereon. However, Griffen et al. do not teach wherein each isolator comprises a spring having an adjustable spring

Art Unit: 3683

constant, and wherein each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple or wherein the isolators are configured to be tuned. Cunningham et al. teaches wherein each isolator comprises a spring having an adjustable spring constant, and wherein each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple as is acknowledged by applicant on page 2, lines 17-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have tuned and adjusted each isolator to provide the desired vibration isolation in six degrees of freedom or the required amount of damping. (Cunningham, Column 8, lines 43-43)

4. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffen et al. in view of Cunningham et al. and further in view of Gran et al.

Re claim 9, Griffin et al. does not teach wherein the isolators comprise tubular damping struts with first and second spherical pivots at opposite ends of the tubular damping strut. Gran et al. teaches isolators comprise tubular damping struts (6) with first and second spherical pivots at opposite ends of the tubular damping strut in a hexapod configuration. (Fig. 2, 6) The examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the isolators and pivots of Gran et al. in the assembly of Griffin et al. as the use of damping struts and pivots is well known in hexapod assemblies.

Conclusion

Art Unit: 3683

have used the isolators and pivots of Gran et al. in the assembly of Griffin et al. as the use of damping struts and pivots is well known in hexapod assemblies.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (571)272-7127. The examiner can normally be reached on Monday, 6:00 AM - 4:30 PM and Tuesday, 6:00 AM – 12:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571)272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MT
7/10/06

Melanie Torres
Melanie Torres
Primary Examiner
7/10/06